



UNITED STATES PATENT AND TRADEMARK OFFICE

un

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,440	10/28/2003	June Ho Park	10125/4124	6766
7590 11/16/2007				
Brinks Hofer Gilson & Lione		EXAMINER		
Post Office Box 10395		DUONG, TAI V		
Chicago, IL 60610				
		ART UNIT	PAPER NUMBER	
		2871		
		MAIL DATE	DELIVERY MODE	
		11/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/696,440	Applicant(s) PARK ET AL.	
	Examiner Tai Duong	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-26 and 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-26 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/23/07 has been entered.

The 102 rejections over Kameyama et al and Iijima are withdrawn in view of the amendments to the claims and Applicant's remarks.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recited feature "*a thin layer* is the only layer disposed between [the] passivation layer of the second polarizing plate and the light diffusion layer" of claim 41 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-26 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 is confusing because the recited feature "wherein the light-diffusion layer is disposed in contact with the second polarizing plate" is redundant with respect to the recited feature "the second polarizing plate comprising a passivation layer and having a light-diffusion layer on a surface thereof". Also, it is unclear whether the passivation layer of claim 11 is the third passivation layer of claim 12 or an additional passivation layer. If the passivation layer of claim 11 is the third passivation layer of claim 12, claim 13 is redundant with respect to the recited feature "wherein the light-diffusion layer directly contacts the passivation layer" of claim 11. Claims 14-26 are also rejected since they depend on the indefinite claims. In claim 41, the recited features "the light-diffusion layer" and "the third passivation layer" lack antecedent basis. Claim 41 is also rejected as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary

structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the relationships of the diffusion layer with respect to the passivation layer of the second polarizing plate and the backlight unit.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Related Art Figs. 1 and 2 (ARA Figs. 1 and 2) in view of Kameyama et al (US 6,339,501) and Umemoto (US 6,542,300). Unless indicated otherwise by Applicant, the examiner *assumes* that the Related Art Figs. 1 and 2 are Prior Art, as mentioned on page 4 of the Office Action mailed on 09/13/2006.

ARA Figs. 1 and 2 disclose a LCD device comprising a liquid crystal layer 13 between lower 10 and upper 1 substrates; a first polarizing plate 14a on the upper substrate; a second polarizing plate 14b below the lower substrate; and a backlight unit below the second polarizing plate. The second polarizing plate 14b comprises a first adhesive layer 20, a first passivation layer 21, a polarizer 22, a second passivation layer 23, a second adhesive layer 24, a $\lambda/4$ phase shift plate, a third adhesive layer 26, a Cholesteric Liquid Crystal (CLC) layer 27 and a third passivation layer 28. Thus, the only difference between the LCD device of ARA Figs.

1 and 2 and that of the instant claims is a light-diffusion layer directly contacts the [third] passivation layer and a plurality of projections are formed on one surface of the light diffusion layer. Kameyama et al disclose in Figs. 3 and 4 a LCD device having a light-diffusion layer 11 disposed in contact with the second polarizing plate 1, and the light-diffusion layer having a plurality of projections 111 being formed on one surface of the light-diffusion layer (col. 2, lines 7-17; col. 8, line 22 – col. 10, line 26). Umemoto discloses that it was known to form the light-diffusion layer being disposed in direct contact with the passivation (protective) layers of the polarizing plate (col. 7, lines 64-67; col. 5, lines 14-23). Thus, it would have been obvious to a person of ordinary skill the art in view of Kameyama et al and Umemoto to employ in the LCD device of ARA Figs. 1 and 2 a light-diffusion layer having a plurality of projections, the light-diffusion layer being disposed in direct contact with the [third] passivation layer 28 for obtaining a large area LCD device which is thin, excellent in luminance and excellent in display quality (as disclosed by Kameyama, col. 2, lines 14-17). Also, it would have been obvious to a person of ordinary skill in the art to employ a total of Haze of the first polarizing plate and Haze of the second polarizing plate being at least about 40% for reducing backlight Mura phenomenon.

Claims 25 and 26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 25 is allowed over the prior art of record. None of the prior art discloses or suggests a LCD device having a structure recited in claim 14 *in combination* with the feature "wherein the adhesive layers are devoid of added beads".

Claim 26 is allowed over the prior art of record. None of the prior art discloses or suggests a LCD device having a structure recited in claim 14 *in combination* with the feature "wherein the light-diffusion layer produces an amount of Haze, and a density of the projections is less than a density of beads that would have to be added to one of the adhesive layers to obtain the same amount of Haze".

Claim 41 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claim 41 is allowed over the prior art of record. None of the prior art discloses or suggests a LCD device having a thin layer being the only layer disposed between the [third] passivation layer of the second polarizing plate and the light diffusion layer, the thin layer is thinner than the third passivation layer.

Applicant's arguments with respect to claims 11-24 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai Duong whose telephone number is (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


TOAN TON
PRIMARY PATENT EXAMINER

TD
11/07